

Stantec Analytical Validation Checklist**Report No. ATH51**

Project Name: Amtrak Wilmington	Project Number: 213402048
Validator: Sarah Von Raesfeld	Laboratory: Eurofins/Lancaster Laboratory
Date Validated: 02/26/2018	Laboratory Project Number: 1899297 / ATH51
Sample Start-End Date: 01/18/2018	Laboratory Report Date: 02/02/2018
Parameters Validated: VOCs by USEPA Method TO-15	
Samples Validated: Basement-2, ELLE # 9416789 RM-119, ELLE # 9416790 Basement-1, ELLE # 9416791 RM-242, ELLE # 9416792 RSE-H, ELLE # 9416793 RM-100, ELLE # 9416794 Hallway Mail, ELLE # 9416795 RM-200, ELLE # 9416796 AA-2, ELLE # 9416797 AA-1, ELLE # 9416798 RM-129A, ELLE # 9416799 Mech H, ELLE # 9416800 B8-1, ELLE # 9416801 B14-1, ELLE # 9416802 B14-B, ELLE # 9416803 B15-1, ELLE # 9416804 B18-1, ELLE # 9416805 B5-1, ELLE # 9416806 B5-2, ELLE # 9416807 B4-1, ELLE # 9416808	
VALIDATION CRITERIA CHECK	
Validation Flags Applicable to this Review: U The analyte was analyzed for, but not detected above the reported sample quantitation limit. J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. J+ Result is estimated quantity but the result may be biased high. J- Result is estimated quantity but the result may be biased low. UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration. B The analyte was detected in the method, field, and/or trip blank. R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.	
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X No
Comments: None	

Stantec Analytical Validation Checklist**Report No. ATH51**

2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes	No X
Comments: None			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments: None			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments: None			
5.	Were sample holding times met?	Yes X	No
Comments: None			
6.	Were correct concentration units reported?	Yes X	No
Comments: None			
7.	Were detections found in laboratory blank samples?	Yes	No X
Comments: None			
8.	Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No
Comments: Not Applicable.			
9.	Were instrument calibrations within method criteria?	Yes	No
Comments: Not Applicable, Level II data validation.			
10.	Were surrogate recoveries within control limits?	Yes	No
Comments: Not Applicable			
11.	Were laboratory control sample(s) (LCS/LCSD) sample recoveries within control limits?	Yes X	No
Comments: None			
12.	Were matrix spike (MS/MSD) recoveries within control limits?	Yes	No
Comments: Not applicable, site-specific MS/MSDs not analyzed.			
13.	Were RPDs within control limits?	Yes X	No
Comments: LCS/LCSD RPDs were within acceptance criteria. Site-specific MS/MSDs were not analyzed.			

Stantec Analytical Validation Checklist
Report No. ATH51

14. Were dilutions required on any samples?		Yes	No
			X
Comments: None			
15. Were Tentatively Identified Compounds (TIC) present?		Yes	No
			X
Comments:			
16. Were organic system performance criteria met?		NA	Yes
		X	No
Comments: None			
17. Were GC/MS internal standards within method criteria?		NA	Yes
		X	No
Comments: None			
18. Were inorganic system performance criteria met?		NA	Yes
		X	No
Comments: Not Applicable			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		Yes	No
			X
Comments: Not Applicable			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?		Yes	No
		X	Initials SVR
Comments: None			
21. Other?		Yes	No
Comments: All samples validated according to USEPA NFG 2014			
PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT			
Precision:	Acceptable	Unacceptable	Initials
	X		SVR
Comments: None			
Sensitivity:	Acceptable	Unacceptable	Initials
	X		SVR
Comments: None			
Accuracy:	Acceptable	Unacceptable	Initials
	X		SVR
Comments: None			
Representativeness:	Acceptable	Unacceptable	Initials
	X		SVR
Comments: None			

Stantec Analytical Validation Checklist**Report No. ATH51**

Method Compliance:	Acceptable X	Unacceptable	Initials SVR
Comments: None			
Completeness:	Acceptable X	Unacceptable	Initials SVR
Comments: None			